## Portable cooking appliance

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Portable cooking appliance

CROSS REFERENCE TO RELATED APPLICATIONS

This application is based on provisional application serial number 60/461,961 filed 04/10/2003.

BACKGROUND OF THE INVENTION

This invention relates generally to the field of portable cooking appliances, and more particularly to tabletop cooking appliances.

The cooking of food takes place in many ways, among them, boiling, baking, barbeque grilling, frying, microwaving, steaming, and cooking on an open flame. A trend in cooking methods has appeared in recent years, paralleling a rising awareness of healthy lifestyles, namely in ways to cook food without introducing additional calories or fat, and if possible, removing a portion of the fat inherent in such foods as meats.

There exist on the market many portable cooking appliances that grill food in a manner that allows the fat from cooking to drain away from the food, that is a simple matter of tilting the appliance so the grease flows downhill. The disadvantage to such appliances currently available include limiting the user to the closed cooking position, preventing viewing of the food during cooking, cooking space limited to one half of the appliances available surface area, storage limited to the least space efficient

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configuration whereby the appliance lays flat and occupies a large portion of the shelf, and limited cleanability due to fixed cooking grills.

It is obvious that an invention is needed to give users a wide range of functionality and solve problems unaddressed by the products currently available. The present invention provides for cooking of food in a manner that may remove a large portion of the fat contained in said food. In addition, it provides a tabletop cooking appliance that cooks in multiple positions, allows cooking fat to drain away from the food, easily stores upright, has removable cooking surfaces, and can cook in fat draining and level modes simultaneously.

## **BRIEF SUMMARY OF THE INVENTION**

The primary object of the invention is to provide a tabletop cooking appliance that cooks in multiple positions.

Another object of the invention is to provide a tabletop cooking appliance that cooks food disposed at such an angle that the fat from cooking drains away from the food.

Another object of the invention is to provide a tabletop cooking appliance that has removable cooking surfaces.

Another object of the invention is to provide a tabletop cooking appliance that can cook two types of food simultaneously; draining fat from one side while cooking level on the other side.

Another object of the invention is to provide a tabletop cooking appliance that is assembled with dual sliding pin hinges, allowing for multiple positions and accounting for varying thicknesses of food.

In accordance with a preferred embodiment of the present invention, The appliance is hingeably assembled in two halves, each of which can contain a cooking surface that is either flat or contains a plurality of ridges, and may incorporate one or more heating elements.

Other objects and advantages will become apparent from the following descriptions, taken in connection with the accompanying drawings, wherein, by way of illustration and example, an embodiment of the present invention is disclosed.

## BRIEF DESCRIPTION OF THE SEVERAL DRAWINGS

The drawings constitute a part of this specification and include exemplary embodiments to the invention, which may be embodied in various forms. It is to be understood that in some instances various aspects of the invention may be shown exaggerated or enlarged to facilitate an understanding of the invention.

Figure 1 is a perspective view in the upright and stored position in accordance with a preferred embodiment of the present invention.

Figure 2 is a perspective view of the cooking appliance of Figure 1, showing the open operational position with both halves in fat draining mode.

Figure 3 is a perspective view of the cooking appliance of Figure 1, showing one preferred attachment method for the cooking surfaces.

Figure 4 is a side elevational view of the cooking appliance of Figure 1, showing both halves draining fat towards the center.

Figure 5 is a side elevational view of the cooking appliance of Figure 1, showing one half in fat draining mode and the other half in level cooking mode.

Figure 6 is a perspective view of the cooking appliance of Figure 1 showing the open operational position with one half in fat draining mode and the other half in level cooking mode.

Figure 7 is an exploded assembly view of a preferred embodiment showing one method of assembly.

Detailed descriptions of the preferred embodiments are provided herein. It is to be understood, however, that the present invention may be embodied in various forms. Various aspects of the invention may be inverted, or changed in reference to specific part shape and detail, part location, or part composition. Therefore, specific details disclosed herein are not to be interpreted as limiting, but rather as a basis for the claims and as a representative basis for teaching one skilled in the art to employ the present invention in virtually any appropriately detailed system, structure or manner.

Figure 1 shows an exterior perspective view of a preferred embodiment of the invention in the vertically stored position, showing the exterior housing halves 10 and 20, integrating the storage foot geometry 11 and 21, the carry handle opening 12 and 22, and the stabilizing foot 13.

Turning now to figure 2, there is shown a preferred embodiment of the invention in the open position, exposing the cooking grills 30, disposed with a plurality of ridges 31, in this embodiment being symmetrical so that one part fits both housing halves 10 & 20. The invention in this view may cook such that the fat from cooking drains towards each opposing cooking grill 31, flows down the ramp 40, and is directed by the finger pull geometry 33 into the grease cup 50. The appliance halves in this embodiment are held slidably in multiple positions by the dual sliding pin hinges 60.

Turning now to figure 3, there is shown a preferred embodiment of the invention showing one half of the exterior housing 10 and illustrating how the grill 30 is inserted and removed for cleaning, to insert namely by first inserting the grill tabs 32 into the housing slots 14 and pressing the ramp end of the grill 40 into the spring clip 15,

reversing this procedure to remove the grill, using the finger pull geometry 33 to release the grill 30 from the spring clip 15.

Turning now to figure 4, there is shown a preferred embodiment of the invention in side elevational view as placed on a flat surface for cooking. The exterior housings 10 & 20 are disposed at an angle to the flat surface by resting on the stabilizing foot 13 & 23 and the storage foot 11 & 21, maintained in opposition to each other by the hinge 60, and allowing cooking fat to drain into the grease cup 50.

Turning now to figure 5, there is shown a preferred embodiment of the invention in side elevational view as placed on a flat surface for cooking. The exterior housing 10 is disposed at an angle to the flat surface by resting on the stabilizing foot 13 and the storage foot 11. The exterior housing 20 is disposed parallel to the flat surface by resting on the stabilizing foot 23 and by the storage foot 21 resting on the grease cup 50, maintained in opposition to each other by the hinge 60, allowing multiple cooking positions simultaneously as fat from cooking food in housing 10 will drain into the grease cup 50 as the housing 20 maintains a level position.

Turning now to figure 6, there is shown a preferred embodiment of the invention in perspective view positioned on a flat surface with the housings disposed as in figure 5. The griddle plate 70 replaces the grill plate 30 in housing 20 in this configuration.

Turning now to figure 7, there is shown a preferred embodiment of the invention in exploded assembly view. The housings 10 & 20 provide space for the heating elements 80, which are removably attached and captured by the electrical contacts 82 and contact bracket 81. The electrical connection 90 is removably attached to the contacts 82 and provides a means of drawing household electricity well known in the art. The cover panels 28 shield the internal housing structure 16 & 26 from grease and dirt.

While the invention has been described in connection with a preferred embodiment, it is not intended to limit the scope of the invention to the particular form set forth, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.

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